AMENDMENTS TO THE SPECIFICATION

Amend the specification by replacing the first paragraph with the following:

This is ~~an~~ a divisional of application no. 09/579,708 filed May 26, 2000 for patent filed under 35 U.S.C. § 111(a) which is entitled under 35 U.S.C. § 119(e)(1) to the benefit of the filing date of provisional application Serial No. 60/136,217 filed May 26, 1999 under 35 U.S.C. § 111(b), the disclosures of which are incorporated herein by reference.

On page 9, please replace the paragraph bridging pages 9 to 11 with the following:

Of the above-mentioned production processes, the process is not particularly limited as long as titanium oxide particles comprising the brookite crystalline form can be obtained. However, the method of obtaining a titanium oxide sol by subjecting a ~~titanate~~ titanium salt to hydrolysis in an acid solution, which was previously invented by the inventors of the present invention, is preferable. This is because when the titanium oxide particles obtained by the above-mentioned method are made into a titanium-containing composite oxide, a perovskite titanium oxide particle with a small particle size and excellent dispersion properties can be obtained. More specifically, preferable methods include adding titanium tetrachloride to hot water at 75 to 100°C to carry out hydrolysis of the titanium tetrachloride at a temperature which is more than or equal to 75°C, and less than or equal to the boiling point of the solution, with the concentration of the chlorine ions being controlled, thereby obtaining titanium oxide particles with a brookite crystalline structure in the form of a titanium oxide sol (Japanese Patent Application 9-231172), and adding titanium tetrachloride to hot water at 75 to 100°C to carry out hydrolysis of the titanium tetrachloride in the presence of nitrate ions and/or sulfate

ions at a temperature which is more than or equal to 75°C, and less than or equal to the boiling point of the solution, with the total concentration of chlorine ions, nitrate ions, and sulfate ions being controlled, thereby obtaining titanium oxide particles with a brookite crystalline structure in the form of a titanium oxide sol (Japanese Patent Application 10-132195).

On page 11, please replace the paragraph bridging pages 11 and 12 with the following:

To produce a sol in which the perovskite titanium-containing composite oxide particles of the present invention are dispersed, a titanium oxide sol obtained by subjecting a ~~titanate~~ titanium salt to hydrolysis in an acid solution may be used instead of the titanium oxide particles with a brookite crystalline form. There is no limitation to the crystalline form of titanium oxide particles in the titanium oxide sol as long as the titanium oxide sol is obtained by carrying out the hydrolysis of the ~~titanate~~ titanium salt in an acid solution.

On page 12, please replace the paragraph bridging pages 12 and 13 with the following:

When the ~~titanate~~ titanium salt such as titanium tetrachloride or titanium sulfate is subjected to hydrolysis in an acid solution, the reaction rate is reduced as compared with the case where the hydrolysis is carried out in a neutral or alkaline solution. Therefore, the particles can be formed in separate single particles, thereby obtaining a titanium oxide sol with excellent dispersion properties. Further, since anionic ions such as chlorine ions and sulfate ions are not readily trapped in the inside of the generated titanium oxide particles, it is possible to restrain the inclusion of anionic ions in the particles in the course of production of the titanium-containing composite oxide particles. In addition, when a ~~titanate~~ titanium salt is

subjected to hydrolysis in a neutral or alkaline solution, the reaction rate is increased to cause considerable nucleation in the initial stage. The result is that the obtained titanium oxide sol shows poor dispersion properties although the particle size is small, and consequently the particles tend to form a cloud-like aggregate. When such a titanium oxide sol is made into a sol of titanium-containing composite oxide particles, the dispersion properties become poor although the particle size of the particles in the sol is small. In addition, the anionic ions are easily trapped in the inside of the titanium oxide particles in the sol. The removal of these anionic ions will thus become difficult in the subsequent processes.

On page 13, please replace the first full paragraph with the following:

The method of obtaining a titanium oxide sol by subjecting a ~~titanate~~ titanium salt to hydrolysis in an acid solution is not particularly limited as long as the solution can be maintained acid. The method of subjecting titanium tetrachloride serving as a raw material to hydrolysis in a reaction vessel equipped with a reflux condenser, the solution being maintained acid by inhibiting the chlorine atom generated in the course of hydrolysis from escaping, which method was previously invented by the inventors of the present invention (Japanese Patent Application 8-230776) is preferable.

On page 13, please replace the paragraph bridging pages 13 and 14 with the following:

It is preferable that the acid solution of a ~~titanate~~ titanium salt serving as the raw material have a concentration of about 0.01 to about 5 mol/L. When the concentration exceeds about 5 mol/L, the reaction rate of the hydrolysis is accelerated, and a titanium oxide sol with a large particle size and poor dispersion properties is obtained. When the concentration is less

than about 0.01 mol/L, the density of the titanium oxide particles in the obtained sol is decreased, which lowers the productivity.

On page 14, please replace the paragraph bridging pages 14 and 15 with the following:

The method for producing a sol in which the perovskite titanium-containing composite oxide particles are dispersed according to the present invention comprises the step of allowing the titanium oxide particles with a brookite crystalline form, or the titanium oxide sol obtained by subjecting a ~~titanate~~ titanium salt to hydrolysis in an acid solution to react with a metal salt comprising at least one of Ca, Sr, Ba, Pb, or Mg in a liquid phase. Although the reaction conditions are not particularly limited, in general, it is preferable to carry out the reaction in an alkaline solution by employing an alkaline liquid phase. It is preferable that the pH of the solution be about 13.0 or more, and more preferably 14.0 or more. When the pH is set to 14.0 or more, the particle size of the titanium-containing composite oxide particles dispersed in the sol can be decreased.

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

IN THE ABSTRACT:

The abstract has been changed as follows.

A perovskite titanium-containing composite oxide particle having a composition represented by general formula (I), ~~wherein~~ where the specific surface area is about 10 to about 200 m^2/g, the specific surface area diameter D_1 of primary particles defined by formula (II) is about 10 to about 100 nm, and a D_2/D_1 ratio of the average particle size D_2 of secondary particles to D_1 is about 1 to about 10:

M (TiO_3) - - - (I)

[[()]] wherein M is at least one of Ca, Sr, Ba, Pb, or Mg **[[)]]**.

$D_1 = 6 / \rho S$ - - - (II)

[[(]] wherein ρ is the density of the particles, and S is the specific surface area of the particles is disclosed. **[[)]]** The present invention has a small particle size and excellent dispersion properties, so that the particle is suitable for application to functional materials.

~~The perovskite titanium containing composite oxide particle of the present invention shows a small particle size and excellent dispersion properties, so that the particle is suitable for the application to functional materials such as a dielectric material and a piezoelectric material, a memory, and a photocatalyst.~~